

**Commonwealth of Kentucky  
Division for Air Quality**

**PERMIT APPLICATION SUMMARY FORM**

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GENERAL INFORMATION:

Name:	Eastern Kentucky University
Address:	521 Lancaster Avenue Richmond, KY 40475-3102
Date application received:	9/16/2008
SIC Code/SIC description:	8221
Source ID:	21-151-00007
Agency Interest:	2820
Activity:	APE20080001
Permit:	V-08-039

APPLICATION TYPE/PERMIT ACTIVITY:

<input type="checkbox"/> Initial issuance	<input type="checkbox"/> General permit
<input type="checkbox"/> Permit modification	<input type="checkbox"/> Conditional major
__Administrative	<input checked="" type="checkbox"/> Title V
__Minor	<input type="checkbox"/> Synthetic minor
__Significant	<input checked="" type="checkbox"/> Operating
<input checked="" type="checkbox"/> Permit renewal	<input type="checkbox"/> Construction/operating

COMPLIANCE SUMMARY:

<input type="checkbox"/> Source is out of compliance	<input type="checkbox"/> Compliance schedule included
<input type="checkbox"/> Compliance certification signed	

APPLICABLE REQUIREMENTS LIST:

<input type="checkbox"/> NSR	<input checked="" type="checkbox"/> NSPS	<input checked="" type="checkbox"/> SIP
<input type="checkbox"/> PSD	<input type="checkbox"/> NESHAPS	<input type="checkbox"/> Other
<input type="checkbox"/> Netted out of PSD/NSR	<input checked="" type="checkbox"/> Not major modification per 401 KAR 51:001, 1(116)(b)	

MISCELLANEOUS:

- ☐ Acid rain source
- ☐ Source subject to 112(r)
- ☒ Source applied for federally enforceable emissions cap
- ☐ Source provided terms for alternative operating scenarios
- ☐ Source subject to a MACT standard
- ☐ Source requested case-by-case 112(g) or (j) determination
- ☐ Application proposes new control technology
- ☒ Certified by responsible official
- ☐ Diagrams or drawings included
- ☐ Confidential business information (CBI) submitted in application
- ☐ Pollution Prevention Measures
- ☐ Area is non-attainment (list pollutants):

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EASTERN KENTUCKY UNIVERSITY  
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EMISSIONS SUMMARY:

Pollutant	Actual (tpy)	Potential (tpy)
PM	2.00	12.75
PM <sub>10</sub>	0.78	8.75
SO <sub>2</sub>	57.25	216.48
NO <sub>x</sub>	31.83	162.33
CO	16.023	88.93
VOC	0.57	16.72
Single HAPs (HCl)		2.55
Source wide HAPs	0.80	4.57

SOURCE DESCRIPTION:

Eastern Kentucky University (EKU) applied to the Kentucky Division for Air Quality (DAQ) for the renewal of their Title V permit on September 16, 2008. The source, located in Richmond, KY, currently holds operating permit (V-03-025 R2) for the operation of indirect heat exchangers. The facility has three stoker bed coal-fired boilers, two rated at 65.8 MMBtu/hr (emission units 01& 02) and emission unit 04 rated at 84.0 MMBtu/hr, which provide energy to various areas on the EKU campus. Exhaust gasses from the coal burners are directed into a common duct which carries the gasses to a bag house. From the bag house, another duct directs the exhaust gasses through a fan and to a brick stack. Pressure and temperature are monitored on the bag house control panel. Coal is delivered to the boiler operation via truck from the coal storage facility located on campus. The coal is transferred through a vertical conveyor to storage hoppers located above each boiler. Ash is manually removed from the bottom of the stoker and placed in an under-floor conveyor, which moves it to the ash silo. Ash is typically loaded from the silo into trucks and shipped back to the mines via EKU contract with the delivering coal company

A fourth boiler rated at 38.14 MMBtu/hr (emission unit 06), burns only natural gas. EKU has additional twenty eight (28) small boilers rating between 2 MMBtu/hr and 10 MMBtu/hr (emission unit 07-34), constructed before 1972, which burn natural gas and supply heat to the dormitories. Other permitted units include a 0.5 gal/hr paint booth, and significant units including, nineteen (19) natural gas emergency generators, twenty four (24) emergency generators, a woodshop, coal and ash handling operation. The facility is classified major because potential emission of regulated air pollutants, nitrogen oxide (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) is greater than 100 ton per year each.

EMISSIONS SUMMARY

EMISSIONS AND OPERATING CAPS DESCRIPTIONS:

To preclude applicability of Section 112(j) of the Clean Air Act source-wide emissions of a Hydrogen Chloride a single hazardous air pollutant (HAP), shall not exceed 9.0 tons in any consecutive twelve-month period and source-wide emissions of total HAPs shall not exceed 22.5 tons in any consecutive twelve-month period. Also source-wide consumption of coal shall not exceed 15,000 tons per year on a twelve-month rolling total.